

FACT SHEET FOR STATE WASTE DISCHARGE PERMIT ST-7304

FACILITY NAME: BORNSTEIN SEAFOODS, INC.

This fact sheet is a companion document to the draft State Waste Discharge Permit No. ST-7304. The Department of Ecology (the Department) is proposing to reissue this permit, which will allow discharge of screened wastewater to the City of Bellingham Wastewater Treatment Plant (WWTP) at Post Point. This fact sheet explains the nature of the proposed discharge, the Department's decisions on limiting the pollutants in the waste water, and the regulatory and technical bases for those decisions.

Washington State law (RCW 90.48.080 and 90.48.160) requires that a permit be issued before discharge of waste water to waters of the state is allowed. This statute includes commercial or industrial discharges to sewerage systems operated by municipalities or public entities which discharge into public waters of the state. Regulations adopted by the state include procedures for issuing permits and establish requirements which are to be included in the permit (Chapter 173-216 WAC).

The fact sheet and draft permit have been reviewed by the Permittee. Errors and omissions identified in these reviews have been corrected.

GENERAL INFORMATION	
Applicant	Mr. Jay Bornstein, President
Facility Name and Address	Bornstein Seafoods, Inc. 1001 Hilton Avenue P.O. Box 188 Bellingham, WA 98227-0188 Whatcom County
Type of Facility	Seafood Processing
Facility Discharge Location	Latitude: 48° 34' 03" N Longitude: 122° 30' 15" W
Treatment Plant Receiving Discharge	City of Bellingham, Post Point Pollution Control Facility WA-002374-4
Contact at Facility	Mr. Kevin Weatherill, CEO (360) 734-7990 kevinw@bornstein.com

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BACKGROUND INFORMATION

DESCRIPTION OF THE FACILITY

Bornstein Seafoods, Inc., operates a seafood processing facility in Bellingham, south of the Squalicum Fill on Hilton Avenue. The facility has a fillet line, freezer-packing line, fish-trim line, retail area, cold room, and cold storage area for processing fresh and frozen fish. Waste water from processing and cleanup activities is screened and discharged to the Post Point Pollution Control Facility [Bellingham Wastewater Treatment Plant (WWTP)].

INDUSTRIAL PROCESS

Fresh and frozen fish arrives at the plant via fishing vessels or truck. Fish is sorted per species, placed in insulated totes, rinsed, filleted, weighed, and the skin is trimmed off. The fillets may then either be: 1) placed on plastic sheets and blast frozen and boxed, shipped or stored in cold storage or 2) fresh fillet boxed, packed, palletized, and shipped. The frozen fillets may go through a second process of glazing.

Bornstein discharges an average of about 30,000 gallons-per-day of screened seafood processing wastewater to the Bellingham WWTP. Sources of process wastewater at Bornstein's are seafood rinsing, filleting, cleaning, skinning, glazing, trimming, and facility clean-up activities.

The amount of process wastewater discharged to the Bellingham WWTP fluctuates seasonally, with the highest flows typically occurring August through December. The maximum daily flows can reach around 50,000 gpd. All process wastewater, including clean-up water and thawing water, is required to be screened through ¼-inch or finer prior to discharge to the Bellingham system.

DISCHARGE OUTFALL

The process wastewater from the different processing areas enters the Bellingham system at the location denoted as outfall #003. Outfall #001 is on the west end of the facility and conveys waste water from the fillet line, freezer line, fish-trim line, and clean-up water. Outfall #002 is located on the northeast end of the main building and conveys some small amounts of production and clean-up water. Both of these outfalls flow to outfall #003, then to the Bellingham system.

TREATMENT PROCESSES

Waste water consists of rinse and wash water from the fillet line, freezer-packing line, and fish-trim line. Clean-up water from all of these areas contributes to the waste stream. A tangential hydra-sieve treats all the process wastewater that is discharged to outfall #003. This permit requires ¼-inch screens or finer on all discharges to the Bellingham system.

PERMIT STATUS

The previous permit for this facility was issued on October 27, 2000, with an expiration date of October 27, 2005. The permit was modified March 25, 2002. The initial permit required flow proportional samples taken from the two outfall points, #001 and #002, but was modified to require sampling from the final collection point only, designated as outfall #003.

Effluent limits were placed on flow and pH. Monitoring for five-day biochemical oxygen demand (BOD₅) and total suspended solids (TSS) was required to assess the impact on the Bellingham WWTP.

An application for permit renewal was submitted to the Department on March 31, 2005.

SUMMARY OF COMPLIANCE WITH THE PREVIOUS PERMIT

The facility last received a permit compliance inspection on October 13, 2003.

During the history of the previous permit, the Permittee has remained in compliance based on discharge monitoring reports (DMRs) and other reports submitted to the Department and inspections conducted by the Department.

STORMWATER

Bornstein Seafoods applied for, and was granted, coverage under the Washington State Stormwater Baseline General Permit, SO3-000679.

WASTEWATER CHARACTERIZATION

The concentration of pollutants in the discharge was reported in discharge monitoring reports. The proposed wastewater discharge is characterized for the following parameters (based on a summary of the past year of submitted monitoring reports):

Parameter	Concentration (Average/Maximum)
Biochemical Oxygen Demand (BOD ₅)	976 / 1,370 mg/L
Total Suspended Solids (TSS)	456 / 790 mg/L
pH	Range: 6.6 - 7.1 standard units

PROPOSED PERMIT LIMITATIONS

State regulations require that limitations set forth in a waste discharge permit must be based on the technology available to treat the pollutants (technology-based) or be based on the effects of the pollutants to the POTW (local limits). Waste water must be treated using all known, available, and reasonable treatment (AKART) and not interfere with the operation of the POTW.

The more stringent of the local limits-based or technology-based limits are applied to each of the parameters of concern. Each of these types of limits is described in more detail below.

TECHNOLOGY-BASED EFFLUENT LIMITATIONS

All waste discharge permits issued by the Department must specify conditions requiring available and reasonable methods of prevention, control, and treatment of discharges to waters of the state (WAC 173-216-110). The minimum requirements to demonstrate compliance with the AKART standard and specific design criteria for this facility were determined using best professional judgment (BPJ) referencing the Environmental Protection Agency (EPA) contract document, Reassessment of Effluent Limitations Guidelines and New Source Performance Standards for the Canned and Preserved Seafood Processing Point Source Category (1979). The “best conventional pollutant control technology” (BCT) limits recommended in the document were achieved through in-plant changes to reduce water flow and wasteloads, in addition to coarse screening (0.75), followed by fine mesh screening, defined as 20 mesh or finer.

There are no pretreatment standards for new or existing sources in the seafood processing industry discharging to a sanitary sewer system listed in 40 CFR, Part 408. Because of the problems reported by the Bellingham WWTP (strapping or banding material and fish parts clogging the pumps), AKART for surface water discharges of seafood processing wastewater (screening) will be applied to this indirect discharge unless an equivalent alternative plan is approved by the Department.

EFFLUENT LIMITATIONS BASED ON LOCAL LIMITS

Pollutant concentrations in the proposed discharge with technology-based controls in place will not cause problems at the receiving POTW, such as interference, pass-through, or hazardous exposure to POTW workers and will not result in unacceptable pollutant levels in the POTW’s sludge.

Usually the more stringent of the local limits or technology-based limits are applied to each of the parameters of concern discharging to a POTW. Local limits for BOD or TSS have not been developed for the Bellingham WWTP. Therefore, monitoring-only is required for these parameters.

The pH limit of 6-9 is taken from the federal regulation, 40 CFR Part 408 for seafood processing. Pollutant concentrations in the proposed discharge with technology-based controls in place will not cause problems at the receiving POTW, such as interference, pass-through, or hazardous exposure to POTW workers nor will it result in unacceptable pollutant levels in the POTW’s sludge.

COMPARISON OF LIMITATIONS WITH THE EXISTING PERMIT ISSUED 06/29/95

Parameter	Existing Limits	Proposed Limits
Flow	50,000 gpd maximum	50,000 gpd maximum
pH	Between 6.0 - 9.0 standard units	Between 6.0 - 9.0 standard units

The existing permit requires quarterly sampling for BOD, TSS, and pH. Monthly monitoring is indicated because of the TSS and BOD levels in the waste water. The proposed permit requires monthly sampling of these parameters to better assess loadings to the Bellingham WWTP.

MONITORING REQUIREMENTS

Monitoring, recording, and reporting are specified to verify that the treatment process is functioning correctly and that effluent limitations are being achieved (WAC 173-216-110).

The monitoring schedule is detailed in the proposed permit under Condition S2. Specified monitoring frequencies take into account the quantity and variability of the discharge, the treatment method, past compliance, significance of pollutants, and cost of monitoring.

Monitoring for BOD and TSS are being required to further characterize the loadings to the WWTP. These pollutants could have a significant impact on the Bellingham WWTP.

OTHER PERMIT CONDITIONS

REPORTING AND RECORDKEEPING

The conditions of S3 are based on the authority to specify any appropriate reporting and recordkeeping requirements to prevent and control waste discharges [WAC 273-216-110 and 40 CFR 403.12 (e), (g), and (h)].

OPERATIONS AND MAINTENANCE

The proposed permit contains condition S.4 as authorized under Chapter 173-240-150 WAC and Chapter 173-216-110 WAC. It is included to ensure proper operation and regular maintenance of equipment and to ensure that adequate safeguards are taken so that constructed facilities are used to their optimum potential in terms of pollutant capture and treatment. The permit requires the Operations and Maintenance Plan that was prepared during the previous permit cycle be maintained and updated as needed.

PROHIBITED DISCHARGES

Certain pollutants are prohibited from being discharged to the POTW. These include substances which cause pass-through or interference, pollutants which may cause damage to the POTW or harm to the POTW workers (Chapter 173-216 WAC) and the discharge of designated dangerous wastes not authorized by this permit (Chapter 173-303 WAC).

DILUTION PROHIBITED

The Permittee is prohibited from diluting its effluent as a partial or complete substitute for adequate treatment to achieve compliance with permit limitations.

SOLID WASTE PLAN

This proposed permit requires, under the authority of RCW 90.48.080, that the Permittee update the solid waste plan designed to prevent solid waste from causing pollution of the waters of the state as needed. Any updates shall be submitted to the Department.

SPILL PLAN

The Department has determined that the Permittee stores a quantity of chemicals that have the potential to cause water pollution if accidentally released. The Department has the authority to require the Permittee to develop best management plans to prevent this accidental release under section 402(a)(1) of the Federal Water Pollution Control Act (FWPCA) and RCW 90.48.080.

The Permittee has developed a plan for preventing the accidental release of pollutants to state waters and for minimizing damages if such a spill occurs. The proposed permit requires the Permittee to update this plan and submit it to the Department as needed.

GENERAL CONDITIONS

General Conditions are based directly on state laws and regulations and have been standardized for all industrial waste discharge to POTW permits issued by the Department.

Condition G1 requires responsible officials or their designated representatives to sign submittals to the Department. Condition G2 requires the Permittee to allow the Department to access the treatment system, production facility, and records related to the permit. Condition G3 specifies conditions for modifying, suspending, or terminating the permit. Condition G4 requires the Permittee to apply to the Department prior to increasing or varying the discharge from the levels stated in the permit application. Condition G5 requires the Permittee to construct, modify, and operate the permitted facility in accordance with approved engineering documents. Condition G6 prohibits the Permittee from using the permit as a basis for violating any laws, statutes, or regulations. Conditions G7 and G8 relate to permit renewal and transfer. Condition G9 requires the Permittee to control production or wastewater discharge in order to maintain compliance with the permit. Condition G10 prohibits the reintroduction of removed pollutants into the effluent stream for discharge. Condition G11 requires the payment of permit fees. Condition G12 describes the penalties for violating permit conditions.

PUBLIC NOTIFICATION OF NONCOMPLIANCE

A list of all industrial users which were in significant noncompliance with Pretreatment Standards or Requirements during any of the previous four quarters may be annually published by the Department in a local newspaper. Accordingly, the Permittee is apprised that noncompliance with this permit may result in publication of the noncompliance.

RECOMMENDATION FOR PERMIT ISSUANCE

This proposed permit meets all statutory requirements for authorizing a wastewater discharge, including those limitations and conditions believed necessary to control toxics. The Department proposes that the permit be issued for a term of five (5) years.

APPENDICES

APPENDIX A—PUBLIC INVOLVEMENT INFORMATION

The Department has tentatively determined to reissue a permit to the applicant listed on page one of this fact sheet. The permit contains conditions and effluent limitations which are described in the rest of this fact sheet.

No major changes have been made to this permit since the last issuance so Public Notification of the application or draft were not required.

This permit was written by Lori LeVander.

APPENDIX B—GLOSSARY

Average Monthly Discharge Limitation—The average of the measured values obtained over a calendar month's time.

Best Management Practices (BMPs)—Schedules of activities, prohibitions of practices, maintenance procedures, and other physical, structural, and/or managerial practices to prevent or reduce the pollution of waters of the state. BMPs include treatment systems, operating procedures, and practices to control: plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. BMPs may be further categorized as operational, source control, erosion and sediment control, and treatment BMPs.

BOD₅—Determining the Biochemical Oxygen Demand of an effluent is an indirect way of measuring the quantity of organic material present in an effluent that is utilized by bacteria. The BOD₅ is used in modeling to measure the reduction of dissolved oxygen in a-receiving water after effluent is discharged. Stress caused by reduced dissolved oxygen levels makes organisms less competitive and less able to sustain their species in the aquatic environment. Although BOD is not a specific compound, it is defined as a conventional pollutant under the federal Clean Water Act.

Bypass—The intentional diversion of waste streams from any portion of the collection or treatment facility.

Categorical Pretreatment Standards—National pretreatment standards specifying quantities or concentrations of pollutants or pollutant properties which may be discharged to a POTW by existing or new industrial users in specific industrial subcategories.

Compliance Inspection - Without Sampling—A site visit for the purpose of determining the compliance of a facility with the terms and conditions of its permit or with applicable statutes and regulations.

Compliance Inspection - With Sampling—A site visit to accomplish the purpose of a Compliance Inspection - Without Sampling and as a minimum, sampling and analysis for all parameters with limits in the permit to ascertain compliance with those limits; and, for municipal facilities, sampling of influent to ascertain compliance with the 85 percent removal requirement. Additional sampling may be conducted.

Composite Sample—A mixture of grab samples collected at the same sampling point at different times, formed either by continuous sampling or by mixing discrete samples. May be “time-composite” (collected at constant time intervals) or “flow-proportional” (collected either as a constant sample volume at time intervals proportional to stream flow, or collected by increasing the volume of each aliquot as the flow increased while maintaining a constant time interval between the aliquots).

Engineering Report—A document, signed by a professional licensed engineer, which thoroughly examines the engineering and administrative aspects of a particular domestic or industrial wastewater facility. The report shall contain the appropriate information required in WAC 173-240-060 or 173-240-130.

Grab Sample—A single sample or measurement taken at a specific time or over as short a period of time as is feasible.

Industrial User—A discharger of wastewater to the sanitary sewer which is not sanitary wastewater or is not equivalent to sanitary wastewater in character.

Industrial Wastewater—Water or liquid-carried waste from industrial or commercial processes, as distinct from domestic wastewater. These wastes may result from any process or activity of industry, manufacture, trade or business, from the development of any natural resource, or from animal operations such as feed lots, poultry houses, or dairies. The term includes contaminated storm water and, also, leachate from solid waste facilities.

Interference—A discharge which, alone or in conjunction with a discharge or discharges from other sources, both:

Inhibits or disrupts the POTW, its treatment processes or operations, or its sludge processes, use or disposal; and

Therefore is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation) or of the prevention of sewage sludge use or disposal in compliance with the following statutory provisions and regulations or permits issued thereunder (or more stringent State or local regulations): Section 405 of the Clean Water Act, the Solid Waste Disposal Act (SWDA) [including title II, more commonly referred to as the Resource Conservation and Recovery Act (RCRA), and including State regulations contained in any State sludge management plan prepared pursuant to subtitle D of the SWDA], sludge regulations appearing in 40 CFR Part 507, the Clean Air Act, the Toxic Substances Control Act, and the Marine Protection, Research, and Sanctuaries Act.

Local Limits—Specific prohibitions or limits on pollutants or pollutant parameters developed by a POTW.

Maximum Daily Discharge Limitation—The highest allowable daily discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. The daily discharge is calculated as the average measurement of the pollutant over the day.

Pass-through—A discharge which exits the POTW into waters of the-State in quantities or concentrations which, alone or in conjunction with a discharge or discharges from other sources, is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation), or which is a cause of a violation of State water quality standards.

pH—The pH of a liquid measures its acidity or alkalinity. A pH of 7 is defined as neutral, and large variations above or below this value are considered harmful to most aquatic life.

Potential Significant Industrial User—A potential significant industrial user is defined as an Industrial User which does not meet the criteria for a Significant Industrial User, but which discharges wastewater meeting one or more of the following criteria:

- a. Exceeds 0.5 % of treatment plant design capacity criteria and discharges <25,000 gallons per day; or

- b. Is a member of a group of similar industrial users which, taken together, have the potential to cause pass-through or interference at the POTW (e.g., facilities which develop photographic film or paper, and car washes).

The Department may determine that a discharger initially classified as a potential significant industrial user should be managed as a significant industrial user.

Significant Industrial User (SIU)—

- 1) All industrial users subject to Categorical Pretreatment Standards under 40 CFR 403.6 and 40 CFR Chapter I, Subchapter N; and
- 2) Any other industrial user that: discharges an average of 25,000 gallons per day or more of process wastewater to the POTW (excluding sanitary, noncontact cooling, and boiler blow-down wastewater); contributes a process wastestream that makes up 5 percent or more of the average dry weather hydraulic or organic capacity of the POTW treatment plant; or is designated as such by the Control Authority* on the basis that the industrial user has a reasonable potential for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement [in accordance with 40 CFR 403.8(f)(6)].

Upon finding that the industrial user meeting the criteria in paragraph 2, above, has no reasonable potential for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement, the Control Authority* may at any time, on its own initiative or in response to a petition received from an industrial user or POTW, and in accordance with 40 CFR 403.8(f)(6), determine that such industrial user is not a significant industrial user.

*The term "Control Authority" refers to the Washington State Department of Ecology in the case of nondelegated POTWs or to the POTW in the case of delegated POTWs.

Slug Discharge—Any discharge of a nonroutine, episodic nature, including but not limited to an accidental spill or a non-customary batch discharge to the POTW. This may include any pollutant released at a flow rate which may cause interference with the POTW.

State Waters—Lakes, rivers, ponds, streams, inland waters, underground waters, salt waters, and all other surface waters and watercourses within the jurisdiction of the state of Washington.

Technology-based Effluent Limit—A permit limit that is based on the ability of a treatment method to reduce the pollutant.

Total Suspended Solids (TSS)—Total suspended solids is the particulate material in an effluent. Large quantities of TSS discharged to a-receiving water may result in solids accumulation. Apart from any toxic effects attributable to substances leached out by water, suspended solids may kill fish, shellfish, and other aquatic organisms by causing abrasive injuries and by clogging the gills and respiratory passages of various aquatic fauna. Indirectly, suspended solids can screen out light and can promote and maintain the development of noxious conditions through oxygen depletion.